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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,426

08/16/2006

Alexander Walter

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12/05/2008

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EXAMINER

PAPE, ZACHARY

ART UNIT

PAPER NUMBER

2835

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/581,426	WALTER, ALEXANDER	
	Examiner	Art Unit	
	ZACHARY M. PAPE	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-13, 16-21 is/are rejected.
- 7) ☒ Claim(s) 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following detailed action is in response to the correspondence filed 9/8/2008.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. **Therefore, the at least one power section and said at least one control section are physically separate from one another as per claim 16, the control section comprising elements which are arranged in said at least one power section as per claim 17, and the at least one power section comprises elements which are arranged in said at least one control section as per claim 18 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. The objections to claim 10, 12, and 20 have been withdrawn in view of the amendments thereto.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-13, 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hrovat et al. (US 6,651,761 – hereinafter, "Hrovat").

With respect to claims 9, 13, and 19, Hrovat teaches (In Fig 1) a cooling system for an electrical power unit (64) of an electrically operated vehicle, said power unit comprising at least one power section (42) and at least one control section (26), said cooling system comprising: a first cooling circuit (22) arranged to primarily cool said at least one control section, said first cooling circuit comprising a first heat exchanger (28) configured and arranged to feed coolant to said at least one control section at a first

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coolant temperature; and a second cooling circuit (20) arranged to primarily cool said at least one power section, said second cooling circuit comprising a second heat exchanger (32) configured and arranged to feed coolant to said at least one power section at a second coolant temperature which is higher than said first coolant temperature (Col 3 Lines 45 – 54).

With respect to claim 10, Hrovat teaches (Col 3, Lines 45-52) that the first heat exchanger (28) is configured and arranged to feed coolant to said at least one control section at a coolant temperature of approximately 70C, and said second heat exchanger (32) is configured and arranged to feed coolant to said at least one power section at a coolant temperature of approximately 90C.

With respect to claim 11, Hrovat teaches (In Fig 1) that said second heat exchanger (32) is arranged serially downstream of said first heat exchanger (28) with respect to a direction of air flow (34) toward said first heat exchanger.

With respect to claims 12 and 20, Hrovat further teaches (In Fig 1) a fan (36), said first heat exchanger (28) being arranged serially downstream of said fan (See Fig 1, wherein the fan blows the stream of air toward 32).

With respect to claim 16, Hrovat further teaches (In Fig 1) that said at least one power section (42) and said at least one control section (26) are physically separate from one another. With respect to claim.

With respect to claim 17, Hrovat further teaches that the control section (26) comprises elements which are arranged in a region (Defined as the boundaries of 64 – see the dashed line in Fig 1) of said at least one power section (42).

With respect to claim 18, Hrovat further teaches that said at least one power section (42) comprises elements which are arranged in a region of (Defined as the boundaries of 64 – see the dashed line in Fig 1) said at least one control section.

With respect to claim 21, Hrovat further teaches (In Fig 1) blowing air toward said first heat exchanger (28) with a fan (36).

Allowable Subject Matter

4. Claims 14-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

See the Official Action dated 6/4/2008.

Response to Arguments

5. Applicant's arguments filed 9/8/2008 have been fully considered but they are not persuasive.

6. With respect to the Applicant's remarks to the drawing objection to claim 16 that, "the drawing does indeed show the recitations of dependent claim 16", the Examiner respectfully disagrees. The Examiner acknowledges the recitation from [0019], however the Examiner notes that nowhere in the recitation does it specifically recite that the power and control section are physically separate from each other. Indeed, Fig 1 clearly shows that the two control sections are physically connected to one another since the pcb (4) is integral to both sections. It appears that simply changing the claim

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to read, "... are partitioned from one another" will suffice in overcoming the drawing objection.

7. With respect to the Applicant's remarks to the drawing objection to claims 17-18, "the drawing does depict the recitations of dependent claims 17 and 18", the Examiner respectfully disagrees. While the Examiner agrees that the drawings depict two distinct regions, as defined by the wall (6, see also [0019]), the Examiner disagrees that Fig 1 discloses control section elements which are arranged in the power section and vice versa since Fig 1 clearly discloses that the power section is completely contained on the left side of the wall, and the control section is completely contained on the right side of the wall. Further, while the Examiner appreciates the Applicant's attempt to justify reciting various components of one region being in that of another, the Examiner notes [0019] (which describes Fig 1) of the present invention which, as noted by the Applicant in the remarks, recites, "... dividing the housing 5 into two regions which are closed off from one another". For at least these reasons, Fig 1 fails to detail the amended limitations of claims 17 and 18.

8. With respect to the Applicant's remarks that, "Hrovat fails to teach or suggest a cooling system in which two separate cooling circuit are used to cool the power section and the control section of the same power unit", the Examiner respectfully disagrees. As per both the previous and present Official Actions, the Examiner has clearly detailed that Hrovat teaches a first cooling circuit (22) to cool a control section (26) and a second cooling circuit (20) to cool a power section (42). It was never the Examiner's position that, as alleged in the present remarks, only one cooling circuit (22) is used to cool both

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the control section (defined by the Applicant as 24) and a power section (defined by the Applicant as 26). Further, the Examiner notes that element 64 of Hrovat is reasonably being interpreted as being the "power unit" of the present invention. As disclosed by Hrovat, the power unit (64) includes both cooling circuits (20, 22) and the power (42) and control (26) sections (See Fig 1). For at least these reasons, Hrovat does not "clearly teach away from the cooling systems of independent claim 9" as alleged.

9. With respect to the Applicant's remarks that "the foregoing teachings and deficiencies of Hrovat are indeed consistent with the subject matter of dependent claim 14", the Examiner respectfully disagrees. While the Examiner has indicated that claim 14 is allowable, it appears that the Applicant is attempting to equate the "power unit" of claims 9, 13, and 19 with a single circuit board with both control and power sections, however as discussed above, a power unit is a broad term which can be applied to literally thousands of different applications (I.E. anything which provide a source of power). While Hrovat fails to teach or suggest that the power and control sections are arranged on a common printed circuit board, Hrovat does teach or suggest a power unit as per above.

10. With respect to the Applicant's remarks to any remaining independent or dependent claims, the Examiner notes the remarks in paragraphs 7-8 above.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZACHARY M. PAPE whose telephone number is (571)272-2201. The examiner can normally be reached on Mon.- Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayprakash Gandhi can be reached on 571-272-3740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Zachary M Pape/
Examiner, Art Unit 2835

/Jayprakash N Gandhi/
Supervisory Patent Examiner, Art Unit 2835